



CALL FOR PAPERS

Conference Details

The 22nd Thermal and Fluids Analysis Workshop, [TFAWS 2011](#), sponsored by the NASA Engineering and Safety Center and hosted by the NASA Langley Research Center, will be held August 15-19, 2011 in Newport News, Virginia.

This year's conference theme is: *Developing our Future in Aeronautics and Space through Technology.*

Paper Session Topics

The three technical areas of focus for TFAWS 2011 are Passive Thermal Control and Protection, Life Support/Active Thermal, and Aerothermal. An Interdisciplinary session will also be included for those submissions that do not fit in a single category. Session chairs and contact information are listed below, followed by descriptions of each technical area of focus. Abstracts should be emailed to the chair of the desired session.

Paper Session	Chair	Phone	Send abstracts to
Passive Thermal	Stephen Miller (JSC), Chris Kostyk (DFRC)	(281) 483-5504 (661) 276-5443	Stephen.W.Miller@nasa.gov Chris.B.Kostyk@nasa.gov
Active Thermal/ Fluids/Life Support	Laurie Walls (KSC) Callie McKelvey (MSFC)	(321) 867-1968 (256) 544-4013	Laurie.K.Walls@nasa.gov Callie.S.Mckelvey@nasa.gov
Aerothermal	Mark D'Agostino (MSFC) Aga Goodsell (ARC)	(256) 544-0065 (757) 864-6021	Mark.D'Agostino@nasa.gov Aga.M.Goodsell@nasa.gov
Interdisciplinary	Georg Siebes (JPL), Eric Grob (GSFC)	(818) 354-8553 (301) 286-6488	Georg.Siebes@jpl.nasa.gov Eric.W.Grob@nasa.gov

Passive Thermal

- Passive thermal systems & control: analysis, design and testing for space and aeronautics
- Spacecraft entry thermal protection systems, ablator systems
- Radiative heat transfer, analytical and experimental approaches
- Studies related to MLI, coatings, thermophysical/optical properties, and surface finishes
- Ground test, manufacturing processes, and simulation

For more information on passive thermal systems [click here](#).

Active Thermal/Fluids/Life Support

- Fluids and CFD: analysis, design and test for space and aeronautics
- Active thermal systems and control: components, thermal systems, analysis and testing
- Life support: environmental control and life support systems

For more information about active thermal/fluids/life support [click here](#).

Aerothermal

- Aerothermodynamics: analysis, design, and test for space and aeronautics
- Aeroheating environments: ascent, on-orbit, re-entry
- Plume impingement, on-orbit contamination
- Free molecular heat transfer, analytical and experimental approaches

For more information about aerothermal [click here](#).

Interdisciplinary

- Multi-disciplinary analysis, design, and testing
- Integrated analyses of chemical reactions, electromagnetic interactions, micromechanics, structural motion
- Technology innovations, current and in-development
- Creating environments of inclusion to enable innovation
- Lessons Learned

We are open to a broad range of topics related to thermal/ fluid systems, so please contact us if you are unsure which category you fall under.

Abstract and Paper Submission

The abstract submission deadline is May 13, 2011 and final manuscript submissions are due on July 22, 2011. You will be notified via email of the acceptance of your abstract.

Abstracts can be 200-1000 words and should include the following:

- A description of the paper or presentation to be submitted
- An indication of what is unique about the work
- An assessment of data, results and conclusions that are available
- A status of the state of the work (concept, development, testing, completed study)

Abstracts can be submitted via email or an electronic submission form (coming soon).

A manuscript template will be provided to authors. Full papers are encouraged but not required to give conference presentations.

Typically, 30 minutes will be allotted for each paper, five of which are devoted to questions from the audience. Longer time blocks may be requested by the author.

Clearance/Copyright

Submitted work must be **unclassified** and approved for public release by the appropriate company and/or government agencies. Please allot time for this authorization process. Government employees are expected to complete Document Availability Authorization (DAA) paperwork. The submission must be original work from the author without any portion of the material infringing on any copyright.

The non-NASA employee verification form can be found [here](#).

This form **or** NASA DAA paperwork must be submitted by **July 22, 2011**. After this date, publication in the proceedings is not guaranteed.



For questions related to paper sessions please contact Ruth Amundsen at Ruth.M.Amundsen@nasa.gov or 757-864-7044.